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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/756,091   | 01/13/2004  | Michael Putnam       | PGI6044P1231US      | 3082             |
| 32116  | 7590        | 05/04/2005           | EXAMINER            |                  |
| WOOD, PHILLIPS, KATZ, CLARK & MORTIMER<br>500 W. MADISON STREET<br>SUITE 3800<br>CHICAGO, IL 60661 |             |                      | DANIELS, MATTHEW J  |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1732                |                  |

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/756,091

Applicant(s)

PUTNAM ET AL.

Examiner

Matthew J. Daniels

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10 June 2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Curro (USPN 4695422) in view of Chen (USPN 5990377). **As to Claim 1**, Curro teaches a method of making an imaged thermoplastic film (Abstract, Figs. 10 and 11), comprising the steps of: providing a thermoplastic film (Column 6); providing a foraminous surface (Fig. 5); unwinding said thermoplastic film (6:60-63); advancing said film onto said foraminous surface (Fig. 2); impinging said film with hydraulic pressure so as to impart an image into said film (Figs. 2 and 5); and drying said imaged thermoplastic film (7:50-65). Curro appears to be silent to the drying process comprising the use of a frequency range of electro-magnetic radiation that preserves said image imparted into said film. Chen teaches drying comprising the use of a frequency range of electro-magnetic radiation that preserves said image imparted into said film (13:29-46). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to combine the method of Chen with that of Curro in order to avoid loss of the three-dimensional structure of the film and to increase the drying speed, increasing the speed of the process. **As to Claim 2**, Curro teaches a three-dimensional image transfer device (Fig. 11). **As to Claim 3**, Chen teaches microwaves (13:36-37).

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**Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Curro (USPN 4695422) in view of Lee (USPN 6228462) and Chen (USPN 5990377). **As to Claim 4**, Curro teaches a method of making an imaged thermoplastic film (Abstract, Figs. 10 and 11), comprising the steps of: providing a thermoplastic polymeric melt (2:10-13); providing a foraminous surface (Fig. 2, Item 97); extruding said polymeric melt directly onto the foraminous surface, impinging the film with hydraulic pressure to impart an image into the film (Figs. 2 and 5), and drying the imaged thermoplastic film (7:50-65). Curro appears to be silent to a) providing a support layer and extruding the polymeric melt directly onto the support layer to form a laminate, b) advancing said film laminate onto said foraminous surface, and c) a drying process comprising the use of a frequency range of electro-magnetic radiation that preserves said image imparted into said film. However, these aspects would have been prima facie obvious to one of ordinary skill for the following reasons:

- a) Lee teaches coextruding the film on a support layer to form a laminate (Fig. 5, 8:28-9:63, 8:40-53 in particular, see also Column 12).
- b) Lee teaches advancing the film laminate onto the foraminous surface (Column 14)
- c) Chen teaches drying comprising the use of a frequency range of electro-magnetic radiation that preserves said image imparted into said film (13:29-46).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to combine the method of Lee and Chen with that of Curro in order to enhance softness

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and compression resistance (Lee, 8:45-50) and to increase the process speed by increasing the drying speed while avoiding loss of the three-dimensional structure of the film.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450.

The examiner can normally be reached on Monday - Friday, 8:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJD 4/25/05



**MICHAEL P. COLAIANNI**  
**SUPERVISORY PATENT EXAMINER**